Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL QUALITY MEASURES CLEARINGHOUSE

# General

## Title

Plan all-cause readmissions: the number of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission, for members 18 years of age and older.

## Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

# Measure Domain

## Primary Measure Domain

Related Health Care Delivery Measures: Use of Services

## Secondary Measure Domain

Does not apply to this measure

# Brief Abstract

## Description

This measure is used to assess the number of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission, for members 18 years of age and older. Data are reported in the following categories:

Count of Index Hospital Stays (IHS) (denominator)
Count of 30-day readmissions (numerator)
Average adjusted probability of readmission

Note: For commercial, report only members 18 to 64 years of age.

## Rationale

Discharge from a hospital is a critical transition point in a patient's care. Poor care coordination at discharge can lead to adverse events for patients and avoidable rehospitalization. Hospitalization readmissions may indicate poor care or missed opportunities to coordinate care better. Research shows that specific hospital-based initiatives to improve communication with beneficiaries and their caregivers, coordinate care after discharge and improve the quality of care during the initial admission can avert many readmissions.

There is extensive evidence about adverse events in patients, and this measure aims to distinguish readmissions from complications of care and pre-existing comorbidities (Gallagher, Cen, & Hannan, 2005).

Potentially preventable readmissions are defined as readmissions that are directly tied to conditions that could have been avoided in the inpatient setting. While not all preventable readmissions can be avoided, most potentially preventable readmissions can be prevented if the best quality of care is rendered and clinicians are using current standards of care.

## Evidence for Rationale

Gallagher B, Cen L, Hannan EL. Readmissions for selected infections due to medical care: expanding the definition of a patient safety indicator. In: Henriksen K, Battles JB, Marks ES, Lewin DI, editors. Advances in patient safety: from research to implementation (volume 2: concepts and methodology). Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2005 Feb.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

## Primary Health Components

30-day readmission

## Denominator Description

- All acute inpatient discharges for commercial members age 18 to 64 years as of the Index Discharge Date who had one or more discharges on or between January 1 and December 1 of the measurement year
- All acute inpatient discharges for Medicare members age 18 years and older as of the Index Discharge Date who had one or more discharges on or between January 1 and December 1 of the measurement year

See the related "Denominator Inclusions/Exclusions" field

## Numerator Description

At least one acute readmission for any diagnosis within 30 days of the Index Discharge Date (see the related "Numerator Inclusions/Exclusions" field)

# Evidence Supporting the Measure

## Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

## Additional Information Supporting Need for the Measure

- A "readmission" occurs when a patient is discharged from the hospital and then admitted back into the hospital within a short period of time. A high rate of patient readmissions may indicate inadequate quality of care in the hospital and/or a lack of appropriate post-discharge planning and coordination. Unplanned rehospitalizations are associated with increased mortality and higher health care costs, and are often avoidable.
- Approximately 3.3 million adults are readmitted to a hospital within 30 days in the United States (U.S.), contributing to $41.3 billion in hospital costs (Hines et al., 2014).
- Medicare beneficiaries account for the largest proportion of readmissions (55.9 percent) and costs associated with readmissions (58.2 percent) (Hines et al., 2014).
- An estimated 23 percent of readmissions are preventable (van Walraven, Jennings, & Forster, 2012).
- The rate of readmission can vary almost two-fold across different areas of the U.S., suggesting room for improvement in some regions (Robert Wood Johnson Foundation [RWJF], 2013).
- In one study, more than half of patients readmitted to the hospital within 30 days of discharge had no evidence of any follow-up visit between discharge and readmission (Jencks, Williams, & Coleman, 2009).
- Post-discharge follow-up programs can reduce readmissions by 22 to 30 percent (Melton et al., 2012; Novak et al., 2012).
- Unplanned readmissions can be prevented by standardizing and improving coordination of care after discharge and increasing support for patient self-management (Boutwell et al., 2009).

## Evidence for Additional Information Supporting Need for the Measure


Boutwell A, Griffin F, Hwu S, Shannon D. Effective interventions to reduce rehospitalizations: a compendium of 15 promising interventions. Cambridge (MA): Institute for Healthcare Improvement; 2009. 26 p.

Hines AL, Barrett ML, Jiang HJ, Steiner CA. Conditions with the largest number of adult hospital readmissions by payer, 2011. Healthcare Cost and Utilization Project (HCUP) Statistical Brief #172. [internet]. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2014 Apr.

Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. N Engl J Med. 2009 Apr 2;360(14):1418-28. PubMed

Melton LD, Foreman C, Scott E, McGinnis M, Cousins M. Prioritized post-discharge telephonic outreach reduces hospital readmissions for select high-risk patients. Am J Manag Care. 2012 Dec;18(12):838-44. PubMed

National Committee for Quality Assurance (NCQA). The state of health care quality 2015. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. 205 p.

Novak CJ, Hastanan S, Moradi M, Terry DF. Reducing unnecessary hospital readmissions: the pharmacist's role in care transitions. Consult Pharm. 2012 Mar;27(3):174-9. PubMed

Robert Wood Johnson Foundation (RWJF). The revolving door: a report on U.S. hospital readmissions. Princeton (NJ): Robert Wood Johnson Foundation (RWJF); 2013 Feb. 60 p.

van Walraven C, Jennings A, Forster AJ. A meta-analysis of hospital 30-day avoidable readmission rates. J Eval Clin Pract. 2012 Dec;18(6):1211-8. PubMed

### Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA's) Committee on Performance Measurement and Board of Directors. Where applicable, measures also are assessed for construct validity using the Pearson correlation test. All measures undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis.

### Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Mar 16. 1 p.

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Behavioral Health Care

Hospital Inpatient

Managed Care Plans

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

### Statement of Acceptable Minimum Sample Size

Does not apply to this measure

### Target Population Age

Age 18 years and older

### Target Population Gender

Either male or female

## National Strategy for Quality Improvement in Health Care

### National Quality Strategy Priority

## Institute of Medicine (IOM) National Health Care Quality Report Categories

### IOM Care Need

Not within an IOM Care Need

### IOM Domain

Not within an IOM Domain

## Data Collection for the Measure

### Case Finding Period

January 1 to December 1 of the measurement year

### Denominator Sampling Frame

Enrollees or beneficiaries

### Denominator (Index) Event or Characteristic

Institutionalization

Patient/Individual (Consumer) Characteristic

# Denominator Time Window

not defined yet

# Denominator Inclusions/Exclusions

Inclusions

All acute inpatient discharges for commercial members age 18 to 64 years as of the Index Discharge Date who had one or more discharges on or between January 1 and December 1 of the measurement year
All acute inpatient discharges for Medicare members age 18 years and older as of the Index Discharge Date who had one or more discharges on or between January 1 and December 1 of the measurement year

The denominator for this measure is based on discharges, not members.

To identify acute inpatient discharges:

Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set)
Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set)
Identify the discharge date for the stay

Include acute discharges from any type of facility (including behavioral healthcare facilities).

Note:

Members must have been continuously enrolled 365 days prior to the Index Discharge Date through 30 days after the Index Discharge Date.
*Allowable Gap*: No more than one gap in enrollment of up to 45 days during the 365 days prior to the Index Discharge Date and no gap during the 30 days following the Index Discharge Date.
*Index Discharge Date*: The Index Hospital Stay (IHS) discharge date. The Index Discharge Date must occur on or between January 1 and December 1 of the measurement year.
*IHS*: An acute inpatient stay with a discharge on or between January 1 and December 1 of the measurement year.
Refer to the original measure documentation for steps to identify acute inpatient stays.

Exclusions

Exclude hospital stays where the Index Admission Date is the same as the Index Discharge Date.
Exclude hospital stays for the following reasons:
- The member died during the stay
- A principal diagnosis of pregnancy (Pregnancy Value Set)
- A principal diagnosis of a condition originating in the perinatal period (Perinatal Conditions Value Set)

Exclude any hospital stay as an Index Hospital Stay if the admission date of the *first* stay within 30 days meets any of the following criteria:
- A principal diagnosis of maintenance chemotherapy (Chemotherapy Value Set)
- A principal diagnosis of rehabilitation (Rehabilitation Value Set)
- An organ transplant (Kidney Transplant Value Set, Bone Marrow Transplant Value Set, Organ Transplant Other Than Kidney Value Set)
- A potentially planned procedure (Potentially Planned Procedures Value Set) without a principal acute diagnosis (Acute Condition Value Set)

Value Set Information
Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the NCQA Web site to purchase HEDIS Volume 2, which includes the Value Set Directory.

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

Inclusions
At least one acute readmission for any diagnosis within 30 days of the Index Discharge Date

Identify all acute inpatient stays with an admission date on or between January 2 and December 31. To identify acute inpatient admissions:

> Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set)
> Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set)
> Identify the discharge date for the stay

For each Index Hospital Stay (IHS), determine if any of the acute inpatient stays have an admission date within 30 days after the Index Discharge Date.

Note:

> *Index Discharge Date*: IHS discharge date. The Index Discharge Date must occur on or between January 1 and December 1 of the measurement year.
> *IHS*: An acute inpatient stay with a discharge on or between January 1 and December 1 of the measurement year.
> Refer to the original measure documentation for steps to identify acute inpatient stays, risk adjustment categories, and risk adjustment weights.

Exclusions
Exclude acute inpatient hospital discharges with a principal diagnosis of pregnancy (Pregnancy Value Set) or a principal diagnosis for a condition originating in the perinatal period (Perinatal Conditions Value Set).

Value Set Information
Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the NCQA Web site to purchase HEDIS Volume 2, which includes the Value Set Directory.

## Numerator Search Strategy

Institutionalization

## Data Source

Administrative clinical data

## Type of Health State

Proxy for Outcome

## Instruments Used and/or Associated with the Measure

Unspecified

# Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Does not apply to this measure (i.e., there is no pre-defined preference for the measure score)

## Allowance for Patient or Population Factors

not defined yet

## Description of Allowance for Patient or Population Factors

This measure requires that separate rates be reported for commercial and Medicare plans.

*Risk Adjustment Determination and Weighting*. For each index hospital stay, risk adjustment categories and weights are calculated based on presence of surgeries, discharge condition, comorbidity, age, and gender.

Measure results are stratified by age.

## Standard of Comparison

not defined yet

# Identifying Information

## Original Title

Plan all-cause readmissions (PCR).

## Measure Collection Name

HEDIS 2016: Health Plan Collection

## Measure Set Name

Utilization and Risk Adjusted Utilization

## Measure Subset Name

Risk Adjusted Utilization

## Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

## Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

## Funding Source(s)

Unspecified

## Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

## Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

## Endorser

National Quality Forum - None

## NQF Number

not defined yet

## Date of Endorsement

2014 Dec 23

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2015 Oct

## Measure Maintenance

Unspecified

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

This measure updates previous versions:

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.
National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

## Measure Availability

Source available for purchase from the National Committee for Quality Measurement (NCQA) Web site.

For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

## Companion Documents

The following are available:

National Committee for Quality Assurance (NCQA). The state of health care quality 2015. Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct. 205 p.
National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical update. Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct 1. 12 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

## NQMC Status

This NQMC summary was completed by ECRI Institute on June 8, 2011.

This NQMC summary was retrofitted into the new template on July 4, 2011.

This NQMC summary was updated by ECRI Institute on October 5, 2012, August 5, 2013, March 3, 2014, April 10, 2015, and again on April 13, 2016.

## Copyright Statement

# Production

## Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

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